

Characteristics of micro-impurities.. S/065/62/000/010/003/004
E075/E136

The inorganic part of the impurities in fuel TS-1 contained 13.7% of Fe after filtration through a filter with 7 micron pores. This indicated that Fe can be present in the fuels in a finely divided state. The second most abundant element in the impurities is Si. The organic part of the contaminants contained S and N, the latter being present only in the organic part, whereas some of the sulphur was present also in the inorganic part of the impurities. To avoid the contamination of the fuels it is advisable to carry out systematic removal of moisture, prevent the formation of high molecular weight resins and exclude metal containing compounds.
There are 4 tables.

Card 2/2

CHERTKOV, Ya.B.

New additives to fuels and oils (survey). Khim. i tekhn. topl.
i masel 7 no.3:64-66 Mr '62. (MIRA 15:2)
(Fuel)
(Lubrication and lubricants---Additives)

34975
S/080/62/035/002/015/022
D258/D302

11.0132

AUTHORS: Chertkov, Ya. R., Leont'yev, B. I., Shchagin, V. M.
and Sazonov, A. Ye.

TITLE: Electron microscope investigation of changes occurring
during the heating of S-containing compounds dissolved
in middle fractions of Volga-region petroleum fuels

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 2, 1962, 394-397

TEXT: The authors studied the formation of a solid phase as the
result of heating middle cuts of petroleum fuels rich in organic S
compounds. This was done to investigate the thermal stability of
such fuels. Samples of a standard fuel TC-1 (TS-1) were desulphur-
ized and then treated with the individual mercaptans, sulphides,
disulphides, thiophanes and thiophenes, normally found in Volga-re-
gion fuels, and also with sulphur-rich concentrates isolated from
the latter. The compounds were added in quantities equivalent to
up to 0.01% of mercaptanic S and up to 0.25% S for the rest. The
solutions were examined under an electron microscope for the pre-

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Electron microscope investigation...

S/080/62/035/002/015/022
D258/D302

sence of solid particles, before and after heating in an autoclave at 120, 150, 200 and 250°C. It was shown that all compounds yielded initially true solutions which formed colloidal systems on heating. Solid particles were formed next. The particle size was greatly increased by raising both temperature and S-concentration. The biggest aggregates were formed with sulphides (at 150 - 200°C), thiophanes (at 200°C) and disulphides (at 150 - 200°C), while solutions of thiophenes remained stable even after heating at 250°C. There are 1 table and 10 references: 7 Soviet-bloc and 3 non-Soviet-bloc. The references to the English-language publications read as follows: E. M. Shelton, C. M. McKinney and O. C. Blade, Petrol. Refiner, 36, 5, 257, (1957); R. B. Thompson, L. W. Druge and J. A. Chenicek, Ind. Eng. Ch., 41, 12, 2615 (1949); C. M. Barringer, M. W. Corsilius and J. D. Rogers, Petrol Processing, 12, 1909, (1955). ✓

SUBMITTED: March 13, 1961

Card 2/2

S/080/62/035/002/016/022
D258/D302

AUTHORS: Savinov, B. G., Chertkov, Ya. B. and Klimenko, P. I.

TITLE: Study of the structure of nitrogen and oxygen-containing compounds in ligroin-kerosene petroleum fractions by the method of infra-red spectra

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 2, 1962, 398-404

TEXT: The authors' aim was to study the little known structures of N- and O-containing constituents present in both straight distillates and cracking products of petroleum fuels. This was done in view of the relative ease of isolation and the possible economic value of these compounds. Kerosene fractions of T-1 and TC-1 (T-1 and TS-1) fuels and cracking products of both high and low S-contents were passed through activated silica gel columns and the residual non-hydrocarbons were first eluted with alcohol benzene, then freed of S compounds and finally purified on activated alumina. A comparison of the infra-red spectra showed the presence of aromatic and heterocyclic structures in all samples. Oxygen was

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Study of the structure ...

S/080/62/035/002/016/022
D258/D302

shown to be present in the form of OH and C = O groups. There are 2 figures, 2 tables and 5 Soviet-bloc references.

SUBMITTED: February 23, 1961

Card 2/2

CHERTKOV, Ya.B.; SHISHKINA, M.V.; AFANAS'YEVA, N.A.

Hydroxyl-containing compounds in the middle distillate petroleum
fuels. Zhur.prikl.khim. 35 no.11:2460-2466 N '62. (MIRA 15:12)
(Petroleum as fuel) (Hydroxyl group—Spectra)

L 9981-63

ACCESSION NR: AP3001313

KPF(c)/EWT(m)/BDS--AFFTC/APGC--Pr-4--RM/MAY/EW/WW/MN

S/0933/63/005/000/0149/0159

AUTHOR: Chertkov, Ya. B.; Shchagin, V. M.; Zrellov, V. N.

TITLE: Effect of organosulfur compounds on the service properties of TS-1 fuel
[Report presented at the Sixth Scientific Session on the Chemistry of Organosulfur
Compounds of Crude Oil and Petroleum Products, held at Ufa, 27 June - 1 July 1961;

SOURCE: AN SSSR. Bashkirskiy filial. Khimiya sersorganicheskikh sovedineniy,
soderzhashchikhsya v neft'yakh i nefteproduktakh, v. 5, 1963, 149-159

TOPIC TAGS: TS-1, hydrofining, thiols, sulfides, disulfides, thiophanes,
thiophenes, sulfur-containing concentrates, GOST 7149-54, bronze, corrosion,
resinous deposit formation, sediment formation, di-o-tolyl disulfide

ABSTRACT: The effect of organosulfur compounds on the service properties of TS-1
fuels has been studied. The experiments were conducted at 120 to 250C with
hydrofined thermally stable (up to 250C) TS-1 fuel to which 23 individual S
compounds (thiols, sulfides, disulfides, thiophanes, and thiophenes) potentially
present in nonhydrofined fuel were added in amounts permissible under the

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L 9981-63
ACCESSION NR: AP3001313

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GOST 7149-54 specifications for total S content; in some cases S-containing concentrates separated from T8-1 fuel were added. The experiments consisted of a determination of the corrosion of and resinous-deposit formation on VB-23NTs bronze and a study of sediment formation. The following are the findings of the experiments: 1) The corrosive effect of organic sulfur compounds (with the exception of di-o-tolyl disulfide) on bronze is low. 2) Sulfides, disulfides, and to a lesser degree thiols form considerable resinous deposits on the metal above 150C. 3) At 150 to 250C acyclic and cyclic sulfides, disulfides, and thiophanes form considerable amounts of fuel-insoluble sediments; the number and size of sediment particles increase with the temperature and concentration of S compounds. 4) Thiophene and its homologs do not impair fuel properties. 5) Experiments conducted with S concentrates showed that the effects of individual S compounds contained in standard fuels in the form of mixtures are equalized. 6) Below 120C the properties of the fuels are not affected by the presence of S compounds in amounts permissible under GOST specifications; at higher temperatures measures must be taken against the adverse effect of these compounds. 7) An electron-microscope study revealed that sediments are the result of a breakdown of colloidal systems formed in the presence of

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L 2981-63
ACCESSION NR: AF3001313

organosulfur compounds with an increase of the particle size. Orig. art. has:
4 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 28 May 63

ENCL: 00

SUB CODE: 00

NO REF SOV: 000

OTHER: 000

ph/ee

Card 3/3

CHERTKOV, Ya.B.; MARINCHENKO, N.I.; ZRELOV, V.N.

Analyzing the microcontaminants and residues in middle distillate
fuels. Nefteper. i neftekhim. no. 11:16-18 '63. (MIRA 17:5)

CHERTKOV, Ya.B.

Increasing the energy content of hydrocarbon fuels. Khim. i
tekhn. topl. i masel 8 no. 2: 63-67 F '63. (MIRA 16:10)

CHERTKOV, Ya.B.

Fuels for supersonic jet airplanes. Khim. i tekhn. topl. i
masel 8 no.5:68-71 My '63. (MIRA 16:8)

CHERTKOV, Ya.B.; RYBAKOV, K.V.; ZRELOV, V.N.; MARINCHENKO, N.I.;
INOZEMTSEVA, M.N.

Formation of trace impurities in middle-distillate fuels.
Zhur. prikl. khim. 36 no.8:1825-1833 Ag '63. (MIRA 16:11)

CHESTKOV, Yakov Borisovich; BABUSHKINA, S.I., ved. red.

[Nonhydrocarbon compounds in petroleum products]
Nouglevodorodnye soedineniia v nefteproduktakh. Mo-
skva, Izd-vo "Khimiia," 1964. 226 p. (MIRA 17:7)

SHOR, G.S.; CHERTKOV, Ya.B.; GOL'DIN, G.S.

Characteristics of the oxidation product composition of
polymer distillate of the butane-butylene fraction. Zhur.
prikl. khim. 37 no.9:2080-2082 S '64.

(MIRA 17:10)

SHOR, G.S.; CHERTKOV, Ya.B.; GOL'DIN, G.S.

~~Characteristics of oxygen compounds of light pyrolysis oil.~~
Characteristics of oxygen compounds of light pyrolysis oil.
Zhur. prikl. khim. 37 no.12:2766-2768 D '64.
(MIRA 18:3)

CHERTKOV, Yakov Borisovich; BOL'SHAKOV, Gennadiy Fedorovich;
~~GULIN, Yevgeniy Il'ich~~; DAVYDOV, P.I., nauchn. red.;
SHEVTSOVA, E.M., ved. red.; YASHCHURZHINSKAYA, A.B.,
tekhn. red.

[Jet fuels] Topliva dlia reaktivnykh dvigatelei. Le-
ningrad, Izd-vo "Nedra," 1964. 225 p. (MIRA 17:3)

ACCESSION NR: AP4009786

S/0065/64/000/001/0051/0055

AUTHORS: Marinchenko, N.I.; Chertkov, Ya. B.; Pishunov, V.A.

TITLE: Scale formation in turbojet engines

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 1, 1964, 51-55

TOPIC TAGS: jet chamber, scaling

ABSTRACT: Scale formation in jet engines was studied and the particular purpose of the present work is a study of some of these problems. Deposits were investigated which accumulated on the injection fuel nozzle and on the whirler of engine I after 100 hours operation on fuel TS-1; on the injection nozzle and walls of the heat pipe of the combustion chamber in engine II after 200 hours operation on fuel T-2; and on the heat pipe of the combustion chamber of engine III after 300 hours operation on fuel T-1. The engines were operated within their warranty period under same conditions as in airplanes. Temperature of fuel nozzles and whirlers in working operations reached 250-3400 while the wall temperature

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ACCESSION NR: AP4009786

in the combustion chamber within the scaling zone did not exceed 250-400C; gas temperatures in front of the turbine were 500-720C. It was concluded that scaling in turbojet combustion chambers is formed in zones having inadequate temperature (250-400C) and too low oxygen concentration for adequate combustion. The scale was found to consist of multistage, consecutive, deep-destruction products of the organic molecule with considerable enrichment of carbon in the final product. The material carbonized because the deposit contained considerable quantities of sulfur, -oxygen- and nitrogen compounds. The deposit also consisted of oxidizable hydrocarbons and nonhydrocarbon organic compounds with sulfur, oxygen and nitrogen contents. At temperatures of 200-400C in an oxygen environment, oxidizing processes transform nonhydrocarbon compounds into resins and ultimately into scale. Orig. art. has no figures, no formulas, 6 tables.

ASSOCIATION: None

SUBMITTED: 00

SUB CODE: CR

DATE ACQ: 10Feb64

NO REF SOV: 006

ENCL: 00

OTHER: 001

Card 2/2

L 53666-65 EWT(m)/EPP(c)/T Pr-4 WE
 ACCESSION NR: AP5009998

UR/0318/65/000/003/002/0007

AUTHORS: Chertkov, Ya. B.; Englina, G. B.

TITLE: Characteristics of resins in intermediate petroleum fuel distillates

SOURCE: Neftepererabotka i neftekhimiya, no. 3, 1965, 24-27

TOPIC TAGS: resin, fuel oil, chromatography, condensation reaction / TS 1 fuel, T 1 fuel

ABSTRACT: Resins that accumulate in intermediate distillates of petroleum fuels are detrimental. The purity of the fuel is determined by the accumulation rate of oxidation products that dissolve in the fuel, by the condensation of these products, by the formation of a colloidal system, and by the formation of a system with the precipitation of a resinous solid phase. In investigating these processes the resinous compounds from the fuels T-1 and TS-1 were studied. The characteristics of these fuels meet the standard GOST 10227-72, except for the mercaptans in TS-1. Sulfur mercaptan in this fuel constitutes 0.003, which is above the permissible amount. The resins were separated from the fuels chromatographically on activated silica gel, and were then analyzed. The properties of the resins are tabulated. Oxidation and condensation of the investigated fuels

Card 1/2

L 53666-65

ACCESSION NR: AP5009998

yield both soluble and insoluble resins. The resins are organic compounds of sulfur, nitrogen, and oxygen. The content of sulfur, nitrogen, and oxygen was found to be much greater in the resins of TS-1 than of T-1. In general, the contents of these elements in the resins increase with condensation. The amount of insoluble resin was found to increase with mercaptan content. It was found that the introduction of solid resin into deresinated fuel, even if very stable, leads to marked secondary oxidation, which in turn leads to the formation of soluble resins first and then insoluble resins in amounts several times the content in the original fuel. Orig. art. has: 4 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: FP, CC

NO REF SOV: 000

OTHER: 000

Card 2/2

L 34905-65 EWT(m)/EPF(c)/I Pr-4 WE

ACCESSION NR: AP5006663

8/0065/65/000/003/0055/0057

AUTHOR: Chertkov, Ya. E.; Englina, O. B.

TITLE: Composition and composition change of gums in middle boiling-range distillate [jet] fuels

SOURCE: Khimiya i tekhnologiya masel, no. 3, 1965, 55-57

TOPIC TAGS: jet fuel, gum, T-1 jet fuel, TS-1 jet fuel, contaminant, fuel

ABSTRACT: A study has been made of the character and kinetics of the phase composition of T-1^A and TS-1^A jet fuels at ambient temperatures. This work was done to determine the origin of minute amounts of nonmineral contaminants in jet fuels that form gums both at high and low temperatures. T-1 fuel from Azerbaydzhan crudes and TS-1 from Volga-region crudes, both middle boiling-range fractions, were used. Both fuels passed GOST 10227-62 specifications except for mercaptan sulfur in TS-1, which exceeded specifications by a factor of 8. The presence of excess sulfur made it possible to get some idea of the effect of sulfur compounds on gum formation (see Table 1 of the Enclosure). Dissolved gums were isolated quantitatively by silica gel chromatography and separated by fractional extraction with heptane, benzene, and methanol. It was found that the methanol- and benzene-soluble gum

Cord 1/3

L 34905-65

ACCESSION NR: AP5006663

fractions were polymeric solids which were insoluble in the fuel. These fractions became fuel-soluble only in the presence of the heptane-soluble gum: fraction, which evidently acts as a buffer solvent. Depending on their concentration, the solids exist in fuel as true solutions or as colloidal suspensions. Prolonged tests (300 days—1 year) showed that as the molecular weight of the initially soluble solids increases, so does their gum-forming tendency. Orig. art. has: 2 tables and 1 figure. [SM]

ASSOCIATION: none

SUBMITTED: 00

ENCL: 01

SUB CODE: FP

NO REF SOV: 000

OTHER: 000

ATD PRESS: 3212

Card 2/3

L 34905-65

ACCESSION NR: AP5006563

ENCLOSURE: 01

Table 1. Composition of gums isolated from jet fuels with silica gel

Gums	T-1		TS-1	
	%	g/ton fuel	%	g/ton fuel
Total	100	1471	100	1311
heptane-soluble	96.93	1426	92.80	1212
benzene-soluble	2.65	39	4.2	59
methanol-soluble	0.42	.6	3.0	40

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L 1808-66 EWT(m)/EPF(c)/T WE

ACCESSION NR: AP5024384

UR/0286/65/000/015/0067/0067
665.545

AUTHOR: Chertkov, Ya. B.; Zrelov, V. N.; Shchagin, V. M.

TITLE: Method of removing contaminants from [jet] fuels. Class 23, No. 173363

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 67

TOPIC TAGS: jet fuel, fuel additive, fuel contamination

ABSTRACT: An Author Certificate has been issued for a method of removing minute contaminants from [jet] fuels by filtration. To speed up and improve the effectiveness of the filtration, an additive which coagulates the contaminants is added to the fuel. The additive is octadecylamidoxycarboxylic acid [sic]. [SM]

ASSOCIATION: none

SUBMITTED: 07Feb63

ENCL: 00

SUB CODE: FP

NO REF SOV: 000

OTHER: 000

ATD PRESS: 4111

Card 1/1

I 18019-66 EWP(1)/EWP(1)/T WE/RM
ACC Nbr AP6006450

SOURCE CODE: UR/0065/66/000/002/0047/0049

AUTHOR: Chertkov, Ya. B.; Bol'shakov, G. F.; Glebovskaya, Ye. A.; Englina, G. B. 55
54
B

ORG: none

TITLE: Structure of insoluble fraction of resins of medium boiling range petroleum
[jet] fuels 55.44

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 2, 1966, 47-49

TOPIC TAGS: jet fuel, fuel gumming property, fuel additive 11 11

ABSTRACT: A study has been made of gum formation in straight-run T type [T-1, TS-1, and T-2]. [jet] fuels (GOST 10227-62). Resins soluble in the fuels were isolated by silica gel chromatography and divided into three fractions: heptane-, benzene-, and methanol-soluble fractions; in the absence of the heptane-soluble fraction, the other two were insoluble in the fuel. The resins were put back in various amounts into deresinified-fuel samples. Then the sample was stored for one year at room temperature with or without access of atmospheric oxygen, after which existent gums were determined gravimetrically and subjected to IR analysis. It was found that with increasing number of hetero atoms and functional groups in the resin molecule, resin solubility in the fuel decreased. With increasing amount of resins added to the fuel, gums increased. Obviously, the high-molecular-weight portion of the resins, particularly the fuel-insoluble resins, very strongly activated the formation of

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UDC: 001.5:665.521.3

L 18019-66

ACC NR: AP6006450

insoluble gums similar to them. The gums were formed by the reaction of compounds of various molecular weights via free oxygen- and sulfur-containing functional groups, and via certain unsaturated bonds in hydrocarbon radicals of hetero atom-containing compounds. When the fuel was in contact with oxygen, gums increased sharply, which confirms the oxidation-polymerization character of gum formation. Gum formation could be limited or prevented by additives. For example, in the presence of 0.005% of a mercaptobenzothiazole derivative [unspecified] in heptane-soluble resin-containing fuel stored for one year in the presence of atmospheric oxygen, the amount of gums formed was 1/5 of that formed in the absence of the additive. Orig. art. has: 1 figure. [SM]

SUB CODE: 21/ SUBM DATE: none/ ORIG REF: 001/ ATD PRESS: 4212

Card

2/2

L 22697-66	EW(m)/T	DJ/WE	SOURCE CODE: UR/0318/66/000/001/0012/0014
ACC NR: AP6007938			
AUTHOR: <u>Chertkov, Ya. B.; Spirkin, V. G.; Demishev, V. N.</u>			
ORG: <u>MINKhIGP</u>			
TITLE: High grade [jet] fuel fractions from Arlan crude oil //			
SOURCE: Neftepererabotka i neftekimiya, no. 1, 1966, 12-14			
TOPIC TAGS: jet fuel, desulfurization, solvent extraction/TS-1 jet fuel, T-1 jet fuel, Arlan crude oil			
<p>ABSTRACT: Solvent extraction with 86 and 91% aqueous sulfuric acid solutions in 1/5 solvent/feed ratio at 15—20C and atmospheric pressure has been used to produce jet fuel components from the 150—325C sour crude-oil fraction from Arlan fields. It is noted that because Arlan crudes are sour, straight-run fuel fractions from such crudes do not meet GOST specifications as to sulfur level. The 150—325C fraction contained 1.57% total sulfur (traces, 0.0004%, of mercaptan sulfur) and 7.9% of silica-gel-absorbable resins. The idea of the solvent extraction method was to remove sulfur compounds—new raw materials for petrochemical usage—without decomposing them, while preserving the composition of the hydrocarbon portion. Sulfide concentrates containing 9.3—13.4% total sulfur were produced. After removal of sulfides the solvent was fully regenerated. From the desulfurized raffinate, straight atmospheric distillation followed by alkaline and water washes produced fractions which exceeded most require-</p>			
Cord 1/2	UDC: 665.63—4.(479.52)		

L 22697-66

ACC NR: AP6007938

ments of GOST 10227-62 specifications for TS-1 and T-1 fuels. Their viscosity characteristic was very favorable, which should ensure satisfactory atomization and good flow and antiwear properties. Anticarbon-forming and combustion properties were also expected to be good. Only the freezing point was unsatisfactory (minus 50C for the 150—260C fraction and minus 40C for the 150—280C fraction) so that the distillates are not suitable as commercial fuels but only as components of such. Their availability, however, increases potential reserves of motor and jet fuels in the USSR. Orig. art. has: 1 table. [SM]

SUB CODE: 21/ SUBM DATE: none/ ORIG REF: 006/ OTH REF: 004/ ATD PRESS: 42/6

Card

2/2

L 45887-66 EWT(m)/EWP(j)/T WE/RM

ACC NR: AP6023962

(A)

SOURCE CODE: UR/0204/66/006/002/0309/0312

AUTHOR: Chertkov, Ya. B.; Spirkin, V. G.; Demishev, V. N.

ORG: Moscow Institute of Petrochemical and Gas Industry im. Gubkin (Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti)

TITLE: Characteristics of stable sulfur compounds of middle fractions of Arlan petroleum //

SOURCE: Neftekhimiya, v. 6, no. 2, 1966, 309-311

TOPIC TAGS: organic sulfur compound, aromatic hydrocarbon, petroleum product

ABSTRACT: It had been shown earlier that when thiophene, its homologs, and benzothiophene derivatives, all belonging to the group of "residual" or "undeterminable" sulfur compounds (as opposed to mercaptans, sulfides, and disulfides), are introduced into jet fuels, the properties of the latter are not lowered. In the present study, sulfides were completely removed from the 150-325° fraction of high-sulfur Arlan petroleum by selective extraction with 86-91% sulfuric acid, and the sulfur content of the fraction thus dropped from 1.57 to 0.5 wt. %. After the removal of sulfides, the fraction displayed a high thermal-oxidative stability. The residual sulfur compounds present in the fraction were then extracted with 92 and 93% sulfuric acid. These compounds, containing about 30% of the total sulfur originally present in the fraction, had no negative effect on the thermal stability or corrosion activity of hydrocarbon

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UDC: 665.547.93(470.52)

L 45887-66

ACC NR: AP6023962

fuels on heating to 150°. One-half of the residual sulfur compounds became sulfonated and were extracted with 92-93% H_2SO_4 ; the remaining ones did not undergo sulfonation. The sulfonated sulfur compounds were regenerated by hydrolytic cleavage. The ultimate composition of the compounds obtained consisted of a mixture of alkyl- and cycloalkyl aromatic derivatives of thiophene, in particular, benzothiophenes, with a small admixture of thiophene homologs. Orig. art. has: 1 figure and 1 table.

SUB CODE: 07,11/ SUBM DATE: 06Jul65/ ORIG REF: 005

Cord 2/2 *LC*

AP6018625

(A)

RM/JW/WE

AUTHOR: Chertkov, Ya. B.; Ignatov, V. M.

SOURCE CODE: UR/0065/66/000/006/0053/0056

ORG: none

TITLE: Comparison of the effectiveness of jet-fuel additives

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 6, 1966, 53-56

TOPIC TAGS: fuel additive, jet fuel, additive effectiveness

ABSTRACT: A study has been made of the effect on jet fuels of the following additives: 1) 2,6-di-tert-butyl-p-cresol (Ionol); 2) p-hydroxydiphenylamine, designated PODFA in the source; 3) FOA-2, made by Dupont; and 4) a C₂₁ aliphatic amine with a tertiary carbon atom in the alkyl group, recommended by Esso. The experiments were conducted with TS-1 fuel containing about 0.13% total sulfur and about 0.003% mercaptan sulfur, and with a highly hydrogenated fuel (3-4% aromatic hydrocarbons). This highly hydrogenated fuel was tested with and without individual sulfur compounds of various types added in amounts permitted by GOST specifications for standard TS-1 fuel. The following amounts of additives were used: 1, 3, or 4, 0.05%; 2, 0.01%. The fuels were heated with agitation at 150C for 6 hr in air. It was shown that: 1) Ionol and PODFA inhibit initial oxidation of the fuel components; 2) FOA-2 and the aliphatic amine inhibit oxidative condensation of existent soluble oxygen compounds which would form insoluble

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UDC: 665.521.3

L 34117-66 EWT(m)/T WE
ACC NR: AP6012847

SOURCE CODE: UR/0080/66/039/004/0906/0911

AUTHOR: Chertkov, Ya. B.; Englina, G. B.

ORG: none

TITLE: Phase transformations in resins of middle-distillate petroleum fuels

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 4, 1966, 906-911

TOPIC TAGS: resin, fuel stability, petroleum fuel, *FUEL PROPERTY*

ABSTRACT: To determine whether the formation of resins (liquid and solid phases) takes place in fuels at low temperatures, the phase behavior was studied in fuels at 15 - 20C in connection with the accumulation and presence in these fuels of resins constituting the products of oxidation and condensation of organic impurities other than hydrocarbons and unstable hydrocarbons. Fuels T-1 (from Azerbaydzhan crudes) and TS-1 (from Volga region crudes) were studied. The middle-distillate fuels were found to contain 3 - 7% of solid matter insoluble in the fuel. The resins soluble in the fuel undergo condensation at first, then form a phase which is insoluble in the fuel. The conversion rate depends on the conditions, i. e., duration of the process, effect of light, access of atmospheric oxygen,

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UDC: 662.68

L 34117-66

ACC NR: AP6012847

temperature, etc. The solid resinous phase even initiates the resinification of stable fuel from which resins had first been removed. The process of formation of secondary resins also goes through a stage where soluble resins are formed and condensed until they form a solid phase insoluble in the fuel. The more condensed the solid resinous phase, the stronger its influence on the resinification of the fuel. The formation of resins in the fuel may be represented by the following sequence: resins soluble in fuel → condensation → colloidal system → suspension → settling (partial separation) of solid phase insoluble in fuel. Orig. art. has: 10 figures and 1 table.

SUB CODE: 07 / SUBM DATE: 17Apr64

Card 2/2 *rela*

CHERTKOV, Ya.B.; ENGLINA, G.B.

Composition and nature of the transformation of the tar of
intermediate distillation fuels. Khim. i tekhn. topl. i
masel 10 no.3:55-57 Mr '65. (MIRA 18:11)

CHERTKOV, Ya.V.; RYBAKOV, K.N.; ZAELOV, V.N.; FOMISHENKO, B.A.

Efficiency of fuel storage filters. Transp. i khran. nefti
no. 3:22-25 '63. (MIRA 17:7)

1. NII-25

L 8076-66 EWT(m)/EPF(c)/T/EWP(t)/EWP(b) TSP(c) JD/WE
ACC NR: AP5026461 SOURCE CODE: UR/0204/65/005/005/0741/0746

AUTHOR: Chertkov, Ya. V.; Spirkin, V. G.; Demishev, V. N.

ORG: Moscow Institute for the Petrochemical and Gas Industry im. I. M. Gubkina
(Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti)

TITLE: Use of sulfuric acid for extracting organic sulfur compounds from petroleum fractions

SOURCE: Neftekhimiya, v. 5, no. 5, 1965, 741-746

TOPIC TAGS: petroleum, petroleum refining, petroleum product, organic sulfur compound, solvent extraction

ABSTRACT: Optimum laboratory conditions were worked out for the selective extraction of sulfur compound from Arlansk petroleum fractions boiling in the 150-325 C range and containing 1.57 wt. % of sulfur. About 70% of the sulfur compounds were recovered without significantly changing their composition by extracting with aqueous sulfuric acid solutions. A two-stage treatment of the crude with 86% aqueous sulfuric acid at room temperature, atmospheric pressure, and extractant: crude ratio = 1:5 removed half of the initial sulfur compounds. Additional sulfur compounds were extracted with 91% aqueous sulfuric acid, extractant:crude = 1:5.

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UDC:665.547.93;546.226-325;542.61

L 8076-66

ACC NR: AP5028461

0

The sulfur compounds and resins were almost completely removed from the extract by dilution, the resins were precipitated and the decanted solution was treated for two hours with fuller's earth. The sulfuric acid was regenerated. The isolated sulfur compounds, containing over 14 wt. % sulfur consisted almost entirely of sulfides. They can be readily vacuum or steam distilled; the distillates are colorless or yellowish transparent liquids. Orig. art. has: 2 tables, 2 figures and 1 equation

SUB CODE:OC,GC/ SUBM DATE: 10Nov64/ ORIG REF: 017/ OTH REF: 006

Cord 2/2 *PW*

L 00211-45 WWP/1 /T/T/A /F/W/H /W/P/I /W/P/L 16

ACCESSION NO. 42-111

BR 6102 01 000 000 000

AUTHOR: Shertkov, Y. Ya. Shertkov, Y. Ya.

TABLE 1. Comparison of the categorical-control index and the categorical-control index for the categorical-control plant.

1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 26

TOPIC TAGS: automatic control, automatic control design, automatic control system, automatic control theory

ABSTRACT: The author for the first time has studied the effect of

14. *Journal of the Sulmer Center at the Dnepropetrovsk State University*, 1977, No. 1, pp. 1-10. 12 figures and 21 formulas.

ASSOCIATION: None

Card 1 / 2

L 52244-65

ACCESSION NR.: AP5011299

SUBMITTED: 15Jul63

ENCL: 00

SUB CODE: EE, DP

NO REF SOV: 006

OTHER: 001

Card 2/2 1/6

CHERTKOV, Z. I.

USSR/Automatics and telemechanics-electromagnetic amplifier

FD-2766

Card 1/1 Pub. 10 - 11/11

Author : Gusev, N. F.; Chertkov, Z. I. (Moscow)

Title : Condition for static stability of a hydraulic electromagnetic amplifier

Periodical : Avtom. i telem., 16, Sep-Oct 1955, 497-500

Abstract : The authors consider the problem of the condition for static stability of a hydraulic electromagnetic amplifier which is employed for fast-acting tracking (servo) drives in throttle regulation. They obtain expressions for the hydraulic and electromagnetic moments which act during the process of operation of an amplifier, and determine the condition for the stability of operation of the amplifier. One reference: N. A. Lifshits, D. Y. Spirin, A. V. Danilin, Teoriya i raschet elementov avtomaticheskikh sistem [Theory and calculation of automatic system elements], 1939.

Institution : -

Submitted : January 23, 1954

CHERTKOVA, ANTONINA ALEKSANDROVNA

7/5
19.10
1956

PROIZVODITEL'NOST' TRUDA NA ZHELEZNOGOROZNIKH TRANSPORTÉ SSSR (OPERATIONAL
EFFICIENCY OF RAILROAD TRANSPORTATION IN THE USSR) MOSKVA, TRANZHELDORIZDAT, 1956.
65 P. TABLES. (POPULYARNAYA BIBLIOTECHKA IO ÉKONOMIKE ZHELEZNOGOROZNOGO
TRANSPORTA.

CHERNKOVA, Antonina Aleksandrovna; PESKOVA, L.N., red.; BOEROVA, Ye.N.,
tekhn.red.

[Labor productivity in Soviet railroad transportation and ways of
improving it] Proisvoditel'nost' truda na zheleznodorozhnom
transporte SSSR i puti ee povysheniia. Moskva, Gos.transp.shel-dor.
isd-vo, 1957. 143 p. (MIRA 10:12)
(Labor productivity) (Railroads)

CHERTKOVA, Antonina Aleksandrovna; MASLOVA, N.S., kand. ekonom.nauk,
otv. red.; KHOMYAKOV, A.I., red. izd-va; SIMKINA, G.S., tekhn.
red.

[Production cost and means for its reduction in the machinery
industry (practice of branches of the machinery industry)] Se-
bestoimost' produktii i puti ee snizheniia v mashinostroenii (na
primere otraslei transportnogo mashinostroeniia). Moskva, Izd-vo
Akad.nauk SSSR, 1961. 141 p. (MIRA 14:12)
(Machinery industry--Costs)

CHERTKOVA, A.K., inzh.

Prospects for guaranteeing the supply of magnetite for coal
preparation. Obog.i brik.ugl. no.30:71-75 '63. (MIRA 17:4)

CHERTKOVA, A. N.

DMITRIYEVA, L. V. - laborant i, KELLER, I. M. - kand. tekhn. nauk, SMOLYAKOVA, Z. A. -
inzh. CHERTKOVA, A. N. - laborant, TROLLE, G. A. - laborant

Respublikanskiy nauchno-issledovatel'skiy institut mestnykh stroitel'nykh materialov
(ROSNIIIMS)

Razrabotka Metodiki Bybora Optimal'nogo Rezhima Sushkikirpicha

Page 103

SO: Collection of Annotations of Scientific Research Work on Construction, com-
pleted in 1950, Moscow, 1951

CHERNOVA, A. V.

Novaya nematoda tetrameris (Petrovimeris) **pavon** is nov. subgen. nov. sp.
of raylini, "Works on Helminthology" on the 75th Birthday of N. I. Skryabin,
Izdat, Akad, Nauk, SSSR, 1953, page 737
All-Union Inst Helminthology im, Acad. K. I. Skryabin

CHERTKOVA, A.N., kand.biologicheskikh nauk

Designation of *Heterakis* and *Dispharynx* in domestic poultry.
Trudy VIGIS 7:60-62 '59. (MIRA 13:11)
(Poultry--Diseases and pests) (Nematoda)

PETROV, A.M.; CHERTKOVA, A.N.

Distinctive features of alveolar and monocellular echinococcus
as revealed by larval and adult forms. Trudy VIGIS 7:129-139
'59. (MIRA 13:11)

(Hydatids)

PETROV, A.M., prof., doktor veterinarnykh nauk; CHERTKOVA, A.N.,
kand. biologicheskikh nauk

Investigation of the helminths of moles in the U. S. S. R.
Trudy VIGIS 6:167-176 '59. (MIRA 15:5)
(Worms, Intestinal and parasitic)
(Parasites—Moles (Animals))

CHERTKOVA, A.N., kand.biologicheskikh nauk

Eurytrema species in domestic ruminants of the U. S. S. R.
Trudy VIGIS 6:183-186 '59. (MIRA 15:5)
(Parasites--Sheep)
(Kazakhstan--Eurytrema)

PETROV, A.M., prof.; CHERTKOVA, A.N., starshiy nauchnyy sotrudnik

A new trematode *Zalophotrema lubimovi* nov. sp. from the liver
of a sea lion. Trudy VIGIS 10:26-29 '63.

A new trematode, *Euanphimerus azerbaijanica* nov. sp. (Opisthorchidae),
from the liver of a nuthatch. Ibid.:29-31 (MIRA 17:9)

PARKHOMENKO, G.I.; YARANTSEVA, Ye.P.; KATS, A.M.; Prinimala uchastiye
CHERTKOVA, A.N.

Prescriptions at the drugstores of Moscow. Apt. delo 14 no. 4:
58-61 J1-Ag '65 (MIRA 19:1)

1. Moskovskoye gorodskoye aptechnoye upravleniye. 2. Nauchno-
issledovatel'skaya aptechnaya stantsiya Moskovskogo gorodskogo
aptechnogo upravleniya (for Chertkova).

CHERTKOVA E. I.

5880. CHERTKOVA E. I. Action of streptomycin on the Koch bacillus *Problemy Tuberk.*
1949, 6 (50-53)

Bacteriostatic action was found at a concentration of 0.3 units/ml., bactericidal
action with over 240 units/ml. Chemical Abstracts

SO: EXCERPTA MEDICA Section II Vol III No 10

C. A. CHERTKOVA, Ye. I.

11c

Use of *p*-acetamidobenzenesulfonyl thiosemicarbazone in tuberculosis and its combination with streptomycin. E. I. Chertkova (Sverdlovsk Tuberc. Inst.). *Problemy Tuberk.* 1960, No. 5, 62-5.—Combined treatment with the two drugs (mouse expts.) failed to show enhanced activity *in vivo*, as well as *in vitro*. The thiosemicarbazone used alone (10 mg. daily for 28 days with 30% mortality) gave 44–52% of cases with complete absence of tubercular organisms in spleen macerates. O. M. Kosolapoff

CHERTKOVA, E. I., **Doc** Med Sci -- (diss) "Experimental studies
on the chemotherapy of tuberculosis," Sverdlovsk, 1957. 21 pp
(Len State Order of Lenin Inst for ^{the} Advanced Training of Physi-
cians im S. M. Kirov), 200 copies (KL, 1-58, 120)

- 83 -

C. HERTKOVA, E. I.

USSR/Pharmacology. Toxicology. Antitubercular Drugs U-8

Abs. Jour : Ref Zhur-Biol., No 7, 1958, 33081

Author : Chertkova E. I.

Inst : ~~Not~~ given

Title : Test of Larusan in Experimental Tuberculosis,
and the Remote Results of the Therapy.

Orig Pub : V sb.: Klinika i terapiya tuberkuloza i organi-
zatsiya bor'by s nim. Sverdlovsk, 1957, 59-69

Abstract : More than 10 thousand plantings were made, and
962 mice, 247 guinea pigs, and 3 ~~dogs~~ were emp-
loyed in the course of 4 years, in the study of
the effect of larusan (1) on tubercular infections.
1 had a bacteriostatic effect in concentration
of 1:10 mln., and in combination with streptomy-
cin or PASK in dilution of 1:30 mln. The bacteri-
cidal action of 1 in relation to tubercular

Card 1/2

CHEKTKOVA, E.I.

Study of the effect of metazide under experiment conditions in
tuberculosis. Khim. i med. no.14:45-49 '60. (MIRA 14:12)

1. Sverdlovskiy institut tuberkuleza (dir. - prof. I.A.Shakleyn).
(TUBERCULOSIS) (METAZIDE)
(MYCOBACTERIUM TUBERCULOSIS)

NIRENBURG, V.L.; POSTOVSKIY, I.Ya.; CHERTKOVA, E.I.

1-aryl-5-alkylmercatotetrazole and 1-aryl-5-alkylsulfonyltetrazole
and their antituberculosis activity. Izv.vys.ucheb.zav.; khim. i
khim.tekh. 8 no.2:258-261 '65. (MIRA 18:8)

1. Ural'skiy politekhnicheskii institut imeni Kirova i Sverdlovskiy
nauchno-issledovatel'skiy institut tuberkuleza.

CHERTKOVA, E.I., kand. med. nauk; UDILOVA, N.N., kand. med. nauk

Role of pyridoxine in experimental chemotherapy of tuberculosis.
Probl. tub. 42 no.10:65-68 '64. (MIRA 18:11)

1. Sverdlovskiy nauchno-issledovatel'skiy institut tuberkuleza (direktor - prof. I.A. Shaklein) Ministerstva zdoravookhraneniya RSFSR.

CHERTKOVA, F.A.

Central State Sci. Control Inst., (-1944-)

"Microflora of the wounds of wartime, after the date of the N....rear evacuation hospital, "

Zhur. Mikrobiol., Epidemiol., i Immunobiol., Nol 9, 1944

[F.A.]
CHERTKOVA, fmm

Central State Sci. Control Inst., (-1944-)

"On the stability of the toxin of anaerobic bacilli in glycerine"

Zhur. Mikrobiol., Epidemiol., i Immunobiol., No. 9 1944.

CHESTKOVA, F. A.

USSR/Medicine - Botulinus Anatoxin

Feb 53

PA 246715
"Evaluation of the Immunogenic Activity of Botulinus Anatoxins of Types A and B," F.A. Chertkova, Z.F. Zubova, T.V. Shapovalova, State Control Inst of Sera and Vaccines imeni L.A. Tarasovich; Moscow Inst of Epidemiol and Microbiol imeni I. I. Mechnikov

"Zhur Mikrobiol, Epidemiol, i Immunobiol" No 2, pp 60-65

Determination of immunogenic properties of Type A botulinus anatoxins can be carried out by administration to guinea pigs and then treating the animals with toxin. This method can be used in the case of Type B anatoxins only when the guinea pigs have been tested for absence of normal antibodies. The antitoxin content found in the blood of guinea pigs immunized with anatoxin characterizes resistance to toxin, viz. the effectiveness of the anatoxin. Quantitative data obtained by the methods described indicate whether the anatoxins are suitable for hyperimmunization of horses.

246715

CHERTKOVA, F.A.; SHAIN, Ye.S.; LEVCHENKO, L.A.

Effectiveness of combined vaccination against diphtheria and tetanus
depending on preceding immunisation. Zhur.mikrobiol.epid. i immun.
27 no.4:49-55 Ap '55. (MIRA 9:7)

1. Iz Gosudarstvennogo kontrol'nogo instituta vaktsin i syvorotok
imeni Tarasevicha.

(VACCINES AND VACCINATION

diphtheria combined with tetanus, eff. of preceding
immun.)

(DIPHTHERIA, prev. & control

vacc., combined with tetanus, eff. of preceding immun.)

(TETANUS, prev. & control

vacc., combined with diphtheria, eff. of preceding immun.)

CHERTKOVA, F. A.

CHERTKOVA, P.A.; DIDENKO, S.I.; USHAKOVA, A.A.

Anaphylactogenic properties of thrombin from horse plasma and
native horse sera. Zhur.mikrobiol.epid. i immun. 28 no.8:107-110
Ag '57. (MIRA 11:2)

1. Iz Gosudarstvennogo kontrol'nogo instituta imeni Tarasevicha.
(ALLERGY, experimental,
anaphylactogenic eff. of thrombin from horse plasma &
native serum (Rus))
(THROMBIN, effects,
same)

GRODYO, N.S.; CHERTKOVA, F.A.

Method of control of immunogenic properties of anatoxins in mice. Zhur.
mikrobiol. epid. i immun. 29 no.11:114-115 N '58. (MIRA 12:1)

1. Iz Gosudarstvennogo kontrol'nogo instituta imeni Tarasevicha.
(VACCINES AND VACCINATION,
control of immunogenic properties of anatoxins for
vacc. on mice (Rus))

17 (6, 12)

SOV/16-60-4-21/47

AUTHOR: Chertkova, F.A., Grodtko, N.S., Ushakova, A.A., Denisova, I.Ya., Kats, F.M.
and Dudarenko, G.V.

TITLE: Standard Botulism Antiserum Type E

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1960, Nr 4,
pp 84 - 87 (USSR)

ABSTRACT: The authors made a study of the standard botulism antiserum type E (batch 216/2) prepared at the Khar'kovskiy institut vaktsin i syvorotok imeni Mechnikova (Institute of Vaccine and Sera imeni Mechnikov, Khar'kov) and also of two other batches of antiserum - batch 205/1, also prepared by the same institute, and batch 16/3 prepared at the Institut epidemiologii i mikrobiologii imeni Gamalei AMN SSSR (Institute of Epidemiology and Microbiology imeni Gamaleya of the AMN, USSR). A standard for the botulism antiserum type E was worked out and the size of one antitoxic unit (AU) set at 0.03 mg of dry substance. An experimental toxin dose was determined and titration of antisera was recommended at 1/10 of this experimental dose (L+10). It was found that the experimental dose of the three batches of toxins prepared on different nutrient media contained different amounts of MLD (minimum lethal dose). Two of the three toxin

Card 1/2

Standard Botulism Antiserum Type E

SOV/16-60-4-21/47

samples studied were activated by trypsin which rather indicated non-specific activation of one of the toxin batches during its preparation. There is 1 table and 11 references, 2 of which are Soviet, 7 English, 1 Italian and 1 French.

ASSOCIATION: Gosudarstvennyy kontrol'nyy institut meditsinskikh biologicheskikh preparatov imeni Tarasevicha (State Control Institute for Medical Biological Preparations imeni Tarasevich); Khar'kovskiy institut vaktsin i syvorotok imeni Mechnikova (Institute of Vaccines and Sera imeni Mechnikov, Khar'kov)

SUBMITTED: September 24, 1958

Card 2/2

BELEN'KAYA, G.M.; GLADSHTEYN, A.I.; LORAN, I.D.; CHERTKOVA, F.A.

Standardization of lydase — a Soviet preparation of testicular
hyaluronidase. Lab. delo 8 no.4:28-32 Ap '62. (MIRA 15:5)

1. TSentral'nyy institut travmatologii i ortopedii (dir. - deystvitel'nyy
chlen AMN SSSR prof. N.N.Priorov [deceased]) i Gosudarstvennyy kontrol'nyy
institut meditsinskikh biologicheskikh preparatov imeni L.A.Tarasevicha
(dir. L.S.Ogloblina).
(HYALURONIDASE)

CHERTKOVA, F.A.; USHAKOVA, A.A.; LUZINA, A.G.

Possibility of determining the reaction-producing qualities of
whooping cough-diphtheria vaccine under experimental conditions.

Report No. 1. Zhur.mikrobiol.epid.i immun. 33 no.5:27-31 My '62.
(MIRA 15:8)

1. Iz Gosudarstvennogo kontrol'nogo instituta meditsinskikh biolo-
gicheskikh preparatov imeni Tarasevicha.

(WHOOPING COUGH--PREVENTIVE INOCULATION)

(DIPHTHERIA--PREVENTIVE INOCULATION)

CHERTKOVA, F.A.; SOKOLOV, S.K.

Response to D.F. Pletsityi. Zhur. mikrobiol., epid. i immun.
33 no.11:97-100 N '62. (MIRA 17:1)

CHERTKOVA, F.A.; LORAN, I.D.

Control of the immunogenic properties of purified serbed staphylo-
coccal anatoxins in experiments on white mice. Zhur. mikrobiol.,
epid. i immun. 40 no.9:70-73 3'63. (NISA 17,5)

1. Iz Gosudarstvennogo kontrol'nogo instituta imeni Tarashevicha.

PONOMAREVA, Natal'ya Afanas'yevna; NECHAYEVA, Aleksandra Semenovna;
CHERTKOVA, F.A., red.

[Gamma globulin] Gamma-globulin. Moskva, Meditsina, 1965.
177 p. (MIRA 18:3)

L 63264-65 EWT(1)/EWA(J)/EWA(b)-2 JK

ACCESSION NR: AP5017014

UR/0016/65/000/001/0016/0020
576.851.553.078.2

AUTHOR: Chertkova, F. A.; Svishcheva, N. D.; Pletneva, I. L.

TITLE: Study of strains of *Clostridium botulinum*, types A, B, C, D, and E

SOURCE: Zhurnal mikrobiologii, epidemiologii i immunobiologii, no. 7, 1965, 16-20

TOPIC TAGS: *Clostridium botulinum*, toxin, microbiology, antigen, bacteriologic culture method

ABSTRACT: The authors investigated 107 strains of the causative agent of botulism isolated during epidemics of the disease to determine the types involved. It was found that the type of toxin could be determined only by means of the toxin neutralization reaction by type-specific sera. Reactions in vitro, precipitation, agglutination, and complement fixation--were useless for this purpose because of the presence of common antigens in types A and B. The neutralization reaction demonstrated the strict specificity of the toxins of types A, B, and E. Common toxin components appeared only in the C and D types. Of the 107 strains studied, only 49 were typed: A--25, B--19, C--2, D--1, E--2. Fifty-eight strains lost their toxigenic

Card 1/2

L 63264-65

ACCESSION NR: AP5017014

properties after prolonged storage. These properties could not be restored even after numerous passages on nutrient media. The presence of common non-toxicogenic antigens in the A and B types was detected in a gel reaction. No correlation was observed between toxicity and number of precipitation lines in agar. Filtrates of the strains that lost their toxigenic properties retained their capacity to form precipitation lines. The precipitation reaction in gel showed that types A and B *Cl. botulinum* possess common antigens. Common antigens were also found in type C and D. Orig. art. has: 4 tables.

ASSOCIATION: Gosudarstvennyy kontrol'nyy institut im. Tarasevicha (State Control Institute)

SUBMITTED: 15 Jan 64

ENCL: 00

SUB CODE: LS

NO REF SOV: 003

OTHER: 005

llc
Card 2/2

CHERTKOVA, F.A.; SVISHCHEVA, N.D.; PLETNEVA, I.L.

Study of the A,B,C, and D types of Clostridium botulinum strains.
Zhur. mikrobiol., epid. i immun. 42 no.7:16-20 J1 '65.
(MIRA 18:11)

1. Gosudarstvennyy kontrol'nyy institut imeni Tarashevicha.

CHERTKOVA, G.A.; USHAKOVA, A.A.; KOLCHURINA, A.A.

White mice as objects for the experimental determination of anaphylactogenic properties of therapeutic sera. Zhur.mikrobiol., epid.i immun. 30 no.12:33-36 D '59. (MIRA 13:5)

1. Iz Gosudarstvennogo kontrol'nogo instituta imeni Tarasevicha.
(IMMUNE SERUMS pharmacol.)
(ALLERGY)

CHERTKOVA, I.N., ispolnyayushchiy obyazannosti assistenta (Voronezh, Leningrad-
skaya ul., 132, kv.15)

Silver impregnation using N.I.Odnoralov's method in macro and
microscopic studies of the innervation of the serous membranes.
Arkhn.anat.gist.i embr. 38 no.2:82-83 F '60. (MIRA 14:6)

1. Kafedra operativnoy khirurgii i topograficheskoy anatomii
(zav. - prof. T.F.Lavrova) Voronezhskogo meditsinskogo instituta.
(SEROUS MEMBRANES—INNERVATION)
(STAINS AND STAINING (MICROSCOPY))

M

Country : USSR
Category: Cultivated Plants. Potatoes. Vegetables. Melons.

Abs Jour: RZhBiol., No 11, 1958, No 48950

Author : Chertkova, M.A.
Inst : Yakutsk Sci. Res. Inst. of Agriculture
Title : On the Problem of Increasing the Yield and Frost
Resistance in Tomatoes by Means of Hardening.

Orig Pub: Dyul. nauchno-telkhn. inform. Yakutskogo n.-i. in-ta,
s.kh. 1957, 1. 9-11.

Abstract: The following experiment was carried out at the
Pokrovskoye Experimental Farm of the Yakutsk, In-
stitute of Agriculture in 1956: Tomato seeds were
soaked in warm water for 12 hours. The excess
water was then removed, and the seeds were kept at

Card : 1/2

CHERTKOVA, M. A. 116

CU

Alterations in the biological properties of cells in tissue cultures under the action of carcinogenic substances. L. F. Lazarev, M. A. Chertkova and A. S. Samokhvalova. *Bull. Acad. Sci. USSR Div. Biol. Sci.* 9, 515-17 (1940) (in English); cf. C. A. 34, 5155. The femoral muscles of newborn mice can be cultured on a mixt. of chicken and rabbit plasma and obtain embryonic cell. Repeated passage caused disappearance of the muscles, and only the fibroblasts continued to grow. Cancer of 1-5 mg. % of benzo(a)pyrene (I) exercised a considerable inhibitory action on the growth of the fibroblasts. Dibenzanthracene showed no pronounced toxic action. I had no toxic action on rapidly growing cultures. Secondary centers of growth, usually at the periphery of the culture, were frequently observed. They grew at a markedly higher rate and possessed a higher mobility than the fibroblasts. It is suggested that the mechanism of the action of carcinogenic substances includes a direct action upon the cells.

S. A. Karjala

BYUL EKSPER BIOL I MED

ASB-11.4 METALLURGICAL LITERATURE CLASSIFICATION

1101 00417V

1101 00417V

KASTORNAYA, M.A.; CHERTKOVA, M.A.

Pulmonary concentration of streptomycin following various methods of administration. Antibiotiki 1 no.3:26-27 My-Je '56. (MLRA 9:10)

1. L'vovskiy nauchno-issledovatel'skiy institut tuberkuleza.
(LUNGS, metabolism,
streptomycin, concentration in various modes of admin.(Rus))
(STREPTOMYCIN, metabolism,
lungs, concentration in various modes of admin. (Rus))

Chertkova, M.A.

KENS, R.I., kand.med.nauk; CHERTKOVA, M.A., kand.med.nauk

Experience in using phthivazid in the form of suppositories in
tuberculous meningitis [with summary in French]. Probl.tub. 34 no.5:
54-56 S-O '56. (MIRA 10:11)

1. Iz L'vovskogo nauchno-issledovatel'skogo instituta tuberkuleza
(dir. G.I.Chemeris, nauchnyy rukovoditel' - prof. I.T.Stukalo).
(TUBERCULOSIS, MENINGEAL, ther.
isoniazid, admin. in suppositories)
(ISONIAZID, ther. use
tuberc., meningeal, admin. in suppositories)

Country :USSR T
 Category :Human and Animal Physiology, The Nervous System
 Abs. Jour. :Ref Zhur Biol, No. 2, 1959, No. 8494
 Author :Shentkov M.A.
 Institut. :~~L'VOVSKY NAUCHNO-ISSLEDovATEL'SKIY INSTITUT~~
 Title :A Study of Higher Nervous Activity in Guinea Pigs with Experimental Tuberculosis. ~~Tuberkulez~~
 Orig Pub. :Zh. vyssh. nervn. deyat-sti, 1957, No. 2, 7, 285--290
 Abstract : Guinea pigs (29) in which a system of conditioned reflexes was established in response to sound and light (according to Kotlyarevskiy's method), were infected with tuberculosis. Three hours after they were infected, a predominance of the excitatory process was noted, after 1--15 days, a predominance of the inhibitory process, and toward the beginning of the second month after a transitional stage of "normalization" of conditioned reflexes, predominance of the excitatory process was again noted, followed by a wave-like extinction of conditioned reflexes.
 Card: 1/2

CHERTKOVA, M.A., kand.med.nauk

Some biochemical indicators in the cerebrospinal fluid of
tuberculous meningitis patients. Pat., klin. i terap. tub.
no. 8:45-47 '58. (MIRA 13:7)

1. Iz L'vovskogo nauchno-issledovatel'skogo instituta tuberku-
leza.

(MENINGES--TUBERCULOSIS) (CEREBROSPINAL FLUID)

CHEPTEKOVA, M.A.; KKHAKTER, Zh.2.

Effect of glutamic acid on the amino acid structure of the blood serum in experimental tuberculosis. Vop. med. khim. 8 no.6:603-607 N-D '62. (MIRA 17:5)

1. Blokhinicheskaya laboratoriya L'vovskogo nauchno-issledovatel'skogo instituta tuberkuleza.

CHERTKOVA, M.A.; KHOMA-LEMISHKO, A.M.

Content of nucleic acid in drug-sensitive and resistant
mycobacteria. Zhur. mikrobiol., epid. i immun. 40 no.4:
31-35 Ap '63. (MIRA 17:5)

1. Iz L'vovskogo nauchno-issledovatel'skogo tuberkuleznogo in-
stituta.

CHERTKOVA, M.L.

Oxygen treatment of skin diseases with manifestations of hemorrhagic diathesis preliminary report. *Pediatrics*, no.6:56-57 N-D '55.

(MLRA 9:6)

1. Iz Leningradskoy bol'nitsy imeni Pastera.

(HEMORRHAGIC DIATHESIS, in inf. and child
cutaneous manifest., ther., oxygen)

(SKIN, in various dis.

hemorrhagic diathesis in child., oxygen ther.)

(OXYGEN, ther. use

skin manifest. of hemorrhagic diathesis in child.)

L 24801-66 EWP(e)/EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(k) IJP(c) JD/HW

ACC NR: AP6011344

SOURCE CODE: UR/0226/66/000/003/0007/0013

AUTHOR: Tikhonov, G. F.; Pyrvalov, L. A.; Chertok, M. M.

ORG: Gor'kiy Polytechnic Institute im. A. A. Zhdanov (Gor'kovskiy politekhnicheskii institut)

TITLE: Effect of spheroidization on the structure and properties of powder

SOURCE: Poroshkovaya metallurgiya, no. 3, 1966, 7-13

TOPIC TAGS: powder metallurgy, iron powder, stainless steel powder, steel micro-structure, cold rolling, spheroidization

ABSTRACT: The effects of spheroidization on the structure and properties of powders were studied using iron powder manufactured by the Sulin Metallurgical Plant and 1Kh17N2, 1Kh18N15, and 1Kh18N9T stainless steel powders obtained by the simultaneous reduction method. To study the effect of spheroidization on the microcrystalline structure of powder, only the 0.200 + 0.160 mm fraction was tumbled. Prior to spheroidization it was annealed for 2 hours at 650C. As a result of tumbling the iron and stainless steel powders approximated the properties of powders of spheroidal particles. The retention of a spongy structure by the powder particles makes them a satisfactory material for rolling and pressing, as a result of which they can be recommended for the manufacture of spongy sintered materials for highly effective use as filters. Orig. art. has: 4 figures and 6 tables. [AM]

SUB CODE: 11, 13, 20/ SUBM DATE: 200ct65/ ORIG REF: 006/ OTH REF: 002/

Card 1/1

ROYTMAN, Ye.A.; CHERTKOVA, M.R.

Standards for humid disinfection of passenger railroad cars by means
of chlorine-containing disinfectants. Zhur. mikrobiol. epid. i immun.
31 no.7:9-15 J1 '60. (MIRA 13:9)

1. Iz Dnepropetrovskoy dorozhnoy sanitarno-epidemiologicheskoy stantsii
Stalinskoy zheleznoy dorogi.

(RAILROADS—SANITATION)

(DISINFECTION)

(CHLORINE)

CHERTKOVA, M.V.: KHA~~RAKTER~~^{TER}, Zh.Z.

The effect of tuberculous infection on conditional reflexes and
phosphorus metabolism of the brain. Probl. tub.³⁴ no.1:33-38
Ja-F '56 (MLRA 9:5)

1. Iz L'vovskogo nauchno-issledovatel'skogo instituta tuberkuleza
(dir. G.I. Chemeris, nauchnyy rukovoditel'-prof. I.T. Stukalo)
(TUBERCULOSIS, exper.
eff. on conditional reflex & phosphorus metab. of brain)
(REFLEX, CONDITIONED, eff. of exper. tuberc.)
(PHOSPHORUS, metab.
of brain, eff. of exper. tuberc.)
(BRAIN,
eff. of exper. tuberc.)

CHERTKOVA, S. I.

CHERTKOVA, S. I.: "Polymerization of the terpenes of turpentine and of cyclopentadiene of the 'benzene head' with hydrogen fluoride". Sverdlovsk. 1955. Min Higher Education USSR. Ural Polytechnic Inst imeni S. M. Kirov. (Dissertations for the Degree of candidate of Technical Sciences.)

So; Knizhnaya letopis' No. 49, 3 December 1955. Moscow.

7
J. Polymerization of individual terpenes α -pinene, dipentene and
camphene in presence of hydrogen fluoride

The polymerization of α -pinene, dipentene and camphene in the presence of hydrogen fluoride was studied. The results show that the polymerization of these terpenes is highly dependent on the reaction conditions, particularly the concentration of the terpenes and the amount of hydrogen fluoride. The polymers obtained are characterized by their high molecular weights and their solubility in various organic solvents.

1977
J. S. Long

Chertkova, S. I.

Oxidation of turpentine by acid catalysts. S. I. Chertkova, V. G. Plyusnin, and E. P. Babin. *Zhur. Priklad. Khim.* 29, 1835-9(1956). Cf. C. A. 50, 17380g, 51, 1894c. —
 Polymerization of turpentine in solns. of solid hydrazocarbons was affected differently by the following catalysts. The highest yield (60%) of solid polymers was obtained with HF. Synthetic aluminosilicate and $BH_3 \cdot AcOH$ gave high yields of dimers and low yields of solid polymers. In the presence of $AlCl_3$ hydro- and dehydrogenation of the original and isomeric terpenes took place, reducing the yield of solid polymers. The temp. had no effect on the polymerization in the presence of HF in the temp. range from -102° to -45° , but at -55° a stable turbid sol. formed.

Chert

Ural'skiy filial Akademii nauk SSSR

24081500, 121
PLYUSNIN, V.G.; RABIN, Ye.P.; CHERTKOVA, S.I.

Hydrogen fluoride polymerization of unsaturated hydrocarbons in
the products of the coke chemical industry. Zhur.prikl.khim.
29 no.7:1070-1078 J1 '57. (MIRA 10:10)

1.Ural'skiy filial AN SSSR.
(Polymerization) (Cyclopentadiene) (Hydrofluoric acid)

13
Aromatization of stump turpentine. V. G. Plyusnin,
S. I. Cherkova, R. P. Babin, and M. A. Mikhailova.
Zhur. Priklad. Khim. 30, 811-1 (1957).—The vapors of
stump turpentine (b. 135-207°) heated at 415-540° were
passed through a column packed with catalyst. The
products were (b. 41-44°) 3550%, (b. 44-50°) 14.5%,
(b. 50-55°) 11.8%, (b. 55-60°) 1.2%, (b. 60-65°) 0.5%,
(b. 65-70°) 0.2%, (b. 70-75°) 0.1%, (b. 75-80°) 0.1%,
(b. 80-85°) 0.1%, (b. 85-90°) 0.1%, (b. 90-95°) 0.1%,
(b. 95-100°) 0.1%, (b. 100-105°) 0.1%, (b. 105-110°) 0.1%,
(b. 110-115°) 0.1%, (b. 115-120°) 0.1%, (b. 120-125°) 0.1%,
(b. 125-130°) 0.1%, (b. 130-135°) 0.1%, (b. 135-140°) 0.1%,
(b. 140-145°) 0.1%, (b. 145-150°) 0.1%, (b. 150-155°) 0.1%,
(b. 155-160°) 0.1%, (b. 160-165°) 0.1%, (b. 165-170°) 0.1%,
(b. 170-175°) 0.1%, (b. 175-180°) 0.1%, (b. 180-185°) 0.1%,
(b. 185-190°) 0.1%, (b. 190-195°) 0.1%, (b. 195-200°) 0.1%,
(b. 200-205°) 0.1%, (b. 205-210°) 0.1%, (b. 210-215°) 0.1%,
(b. 215-220°) 0.1%, (b. 220-225°) 0.1%, (b. 225-230°) 0.1%,
(b. 230-235°) 0.1%, (b. 235-240°) 0.1%, (b. 240-245°) 0.1%,
(b. 245-250°) 0.1%, (b. 250-255°) 0.1%, (b. 255-260°) 0.1%,
(b. 260-265°) 0.1%, (b. 265-270°) 0.1%, (b. 270-275°) 0.1%,
(b. 275-280°) 0.1%, (b. 280-285°) 0.1%, (b. 285-290°) 0.1%,
(b. 290-295°) 0.1%, (b. 295-300°) 0.1%, (b. 300-305°) 0.1%,
(b. 305-310°) 0.1%, (b. 310-315°) 0.1%, (b. 315-320°) 0.1%,
(b. 320-325°) 0.1%, (b. 325-330°) 0.1%, (b. 330-335°) 0.1%,
(b. 335-340°) 0.1%, (b. 340-345°) 0.1%, (b. 345-350°) 0.1%,
(b. 350-355°) 0.1%, (b. 355-360°) 0.1%, (b. 360-365°) 0.1%,
(b. 365-370°) 0.1%, (b. 370-375°) 0.1%, (b. 375-380°) 0.1%,
(b. 380-385°) 0.1%, (b. 385-390°) 0.1%, (b. 390-395°) 0.1%,
(b. 395-400°) 0.1%, (b. 400-405°) 0.1%, (b. 405-410°) 0.1%,
(b. 410-415°) 0.1%, (b. 415-420°) 0.1%, (b. 420-425°) 0.1%,
(b. 425-430°) 0.1%, (b. 430-435°) 0.1%, (b. 435-440°) 0.1%,
(b. 440-445°) 0.1%, (b. 445-450°) 0.1%, (b. 450-455°) 0.1%,
(b. 455-460°) 0.1%, (b. 460-465°) 0.1%, (b. 465-470°) 0.1%,
(b. 470-475°) 0.1%, (b. 475-480°) 0.1%, (b. 480-485°) 0.1%,
(b. 485-490°) 0.1%, (b. 490-495°) 0.1%, (b. 495-500°) 0.1%,
(b. 500-505°) 0.1%, (b. 505-510°) 0.1%, (b. 510-515°) 0.1%,
(b. 515-520°) 0.1%, (b. 520-525°) 0.1%, (b. 525-530°) 0.1%,
(b. 530-535°) 0.1%, (b. 535-540°) 0.1%, (b. 540-545°) 0.1%,
(b. 545-550°) 0.1%, (b. 550-555°) 0.1%, (b. 555-560°) 0.1%,
(b. 560-565°) 0.1%, (b. 565-570°) 0.1%, (b. 570-575°) 0.1%,
(b. 575-580°) 0.1%, (b. 580-585°) 0.1%, (b. 585-590°) 0.1%,
(b. 590-595°) 0.1%, (b. 595-600°) 0.1%, (b. 600-605°) 0.1%,
(b. 605-610°) 0.1%, (b. 610-615°) 0.1%, (b. 615-620°) 0.1%,
(b. 620-625°) 0.1%, (b. 625-630°) 0.1%, (b. 630-635°) 0.1%,
(b. 635-640°) 0.1%, (b. 640-645°) 0.1%, (b. 645-650°) 0.1%,
(b. 650-655°) 0.1%, (b. 655-660°) 0.1%, (b. 660-665°) 0.1%,
(b. 665-670°) 0.1%, (b. 670-675°) 0.1%, (b. 675-680°) 0.1%,
(b. 680-685°) 0.1%, (b. 685-690°) 0.1%, (b. 690-695°) 0.1%,
(b. 695-700°) 0.1%, (b. 700-705°) 0.1%, (b. 705-710°) 0.1%,
(b. 710-715°) 0.1%, (b. 715-720°) 0.1%, (b. 720-725°) 0.1%,
(b. 725-730°) 0.1%, (b. 730-735°) 0.1%, (b. 735-740°) 0.1%,
(b. 740-745°) 0.1%, (b. 745-750°) 0.1%, (b. 750-755°) 0.1%,
(b. 755-760°) 0.1%, (b. 760-765°) 0.1%, (b. 765-770°) 0.1%,
(b. 770-775°) 0.1%, (b. 775-780°) 0.1%, (b. 780-785°) 0.1%,
(b. 785-790°) 0.1%, (b. 790-795°) 0.1%, (b. 795-800°) 0.1%,
(b. 800-805°) 0.1%, (b. 805-810°) 0.1%, (b. 810-815°) 0.1%,
(b. 815-820°) 0.1%, (b. 820-825°) 0.1%, (b. 825-830°) 0.1%,
(b. 830-835°) 0.1%, (b. 835-840°) 0.1%, (b. 840-845°) 0.1%,
(b. 845-850°) 0.1%, (b. 850-855°) 0.1%, (b. 855-860°) 0.1%,
(b. 860-865°) 0.1%, (b. 865-870°) 0.1%, (b. 870-875°) 0.1%,
(b. 875-880°) 0.1%, (b. 880-885°) 0.1%, (b. 885-890°) 0.1%,
(b. 890-895°) 0.1%, (b. 895-900°) 0.1%, (b. 900-905°) 0.1%,
(b. 905-910°) 0.1%, (b. 910-915°) 0.1%, (b. 915-920°) 0.1%,
(b. 920-925°) 0.1%, (b. 925-930°) 0.1%, (b. 930-935°) 0.1%,
(b. 935-940°) 0.1%, (b. 940-945°) 0.1%, (b. 945-950°) 0.1%,
(b. 950-955°) 0.1%, (b. 955-960°) 0.1%, (b. 960-965°) 0.1%,
(b. 965-970°) 0.1%, (b. 970-975°) 0.1%, (b. 975-980°) 0.1%,
(b. 980-985°) 0.1%, (b. 985-990°) 0.1%, (b. 990-995°) 0.1%,
(b. 995-1000°) 0.1%, (b. 1000-1005°) 0.1%, (b. 1005-1010°) 0.1%,
(b. 1010-1015°) 0.1%, (b. 1015-1020°) 0.1%, (b. 1020-1025°) 0.1%,
(b. 1025-1030°) 0.1%, (b. 1030-1035°) 0.1%, (b. 1035-1040°) 0.1%,
(b. 1040-1045°) 0.1%, (b. 1045-1050°) 0.1%, (b. 1050-1055°) 0.1%,
(b. 1055-1060°) 0.1%, (b. 1060-1065°) 0.1%, (b. 1065-1070°) 0.1%,
(b. 1070-1075°) 0.1%, (b. 1075-1080°) 0.1%, (b.

PLYUSNIN, V.G.; BABIN, Ye.P.; CHESTKOVA, S.I.

Improved arrangement for hydrogen fluoride polymerization of terpenes from gum and stump turpentine, cyclopentadiene of benzene heads and unsaturated compounds of crude benzene. Zhur. prikl. khim. 31 no.10:1592-1596 0 '58. (MIRA 12:1)

1. Ural'skiy filial AN SSSR.
(Polymerization) (Hydrocarbons) (Turpentine)

ACC NR: AM6010602

Monograph

UR/

Plyushin, V. G.; Plotkina, N. I.; Chertkova, S. I.; Lysenko, A. P.;
Geyn, N. V.; Varfolomeyev, D. F.
Processing of tars obtained in the pyrolysis of petroleum hydrocar-
bons (Pererabotka smoly piroliza neftyanykh uglevodorodov)
[Sverdlovsk] Sredne-Ural'skoye knizhnoye izd-vo. 1965. 114 p.
illus., biblio. Errata slip inserted. 1,200 copies printed.
Series note: Akademiya nauk SSSR. Ural'skiy filial. Institut
khimii. Trudy, vyp. 8

TOPIC TAGS: petroleum ~~residue~~ product, aromatic hydrocarbon,
pyrolysis ~~tar, hydrocarbon~~, alkene, polymerization, ~~petroleum residue~~,
~~petroleum refining, hydrocarbon~~, benzene, toluene
PURPOSE AND COVERAGE: This issue describes the development of a
process for the refining of residue tars obtained from the pyroly-
sis of petroleum hydrocarbons in order to utilize this waste pro-
duct as an additional source of aromatic hydrocarbons and other
commercial products (from the conversion of the remaining unsatu-
rated compounds). It was determined that unsaturated compounds
contained in pyrolytic tars can be converted into solid polymeric
resins which separate easily from aromatic hydrocarbons.

Card 1/2

Ch. VIII. ~~to~~
~~saturated comp~~

~~CHERTKOVA, V. F.~~
CHERTKOVA, V. F.
USSR/Chemistry - Vulcanization

Card 1/1 Pub. 22 - 20/40

Authors : Kuz'minskiy, A. S., and Chertkova, V. F.

Title : The role of oxygen during natural rubber vulcanization

Periodical : Dok. AN SSSR 99/2, 261-263, Nov 11, 1954

Abstract : Data regarding the role of oxygen during the vulcanization of natural rubber are presented. The oxygen destruction of the rubber in conditions of press vulcanization are found to be of no great importance. The dissolved oxygen participates in the oxidation of the rubber, but the vulcanization process continues at a decreasing rate. An approximate calculation showed that the oxygen consumption per one hour of vulcanization is twenty times lower than during the vulcanization in the open air and the number of destructions is reduced considerably. The effect of anti-oxidants (secondary aromatic amines) on the properties of the rubber, formed during vulcanization, is explained. Eight USSR references (1946-1954). Table; graphs.

Institution : Scientific Research Institute of the Rubber Industry

Presented by: Academician V. A. Kargin, June 10, 1954